

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
7 July 2005 (07.07.2005)

PCT

(10) International Publication Number
WO 2005/060661 A2

(51) International Patent Classification: Not classified

(21) International Application Number:
PCT/US2004/042221

(22) International Filing Date:
16 December 2004 (16.12.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/531,091 19 December 2003 (19.12.2003) US

(71) Applicant (for all designated States except US): **THE REGENTS OF THE UNIVERSITY OF CALIFORNIA** [US/US]; 1111 Franklin Street, 12 th Floor, Oakland, CA 94607-5200 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **CHARLES, L., Sawyers** [US/US]; 3343 Mondeville Canyon Road, Los Angeles, CA 90049 (US). **CHARLIE, D., Chen** [US/US]; 3300 Sawtelle Boulevard, no.306, Los Angeles, CA 90066 (US). **DEREK, Welsbie** [US/US]; 18420 Lemarsh Street, No.28, Northridge, CA 91325 (US).

(74) Agent: **OLDENKAMP, David, J.**: Shapiro & Dupont LLP, Suite 700, 233 Wilshire Boulevard, Suite 700, Santa Monica, CA 90401 (US).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

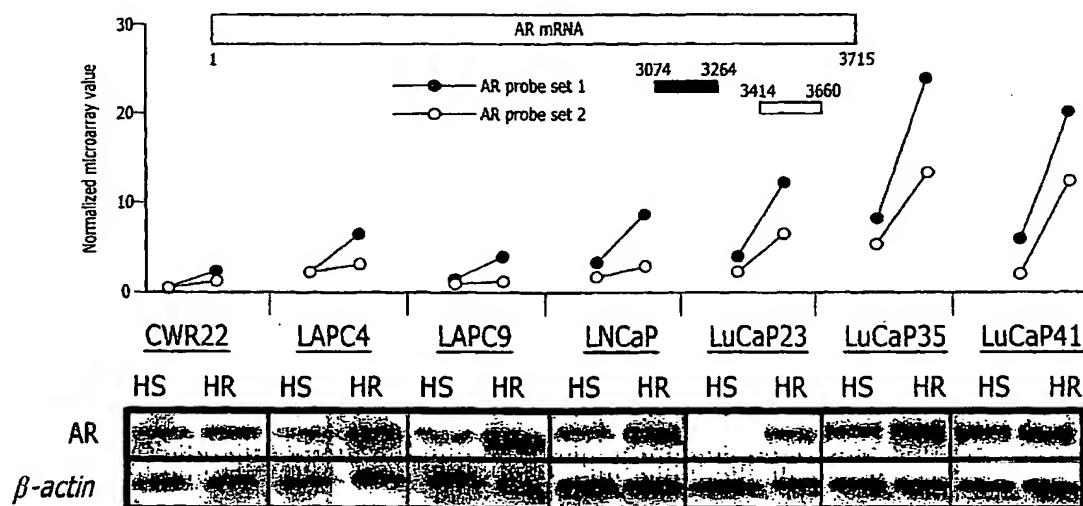
(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declaration under Rule 4.17:

— of inventorship (Rule 4.17(iv)) for US only

[Continued on next page]

(54) Title: METHODS AND MATERIALE FOR ASSESSING PROSTATE CANCER THERAPIES



(57) Abstract: Using microarray-based profiling of isogenic prostate cancer xenograft models, we found that a modest (2-5 fold) increase in androgen receptor (AR) mRNA was the only expression change consistently associated with developing resistance to antiandrogen therapy. Increased levels of AR confer resistance to anti-androgens by amplifying signal output from low levels of residual ligand and altering the normal response to antagonists. This invention provides cell based assays for use in the examination of new therapeutic modalities and provides insight toward the design of novel antiandrogens.